

OIL ANALYSIS REPORT

Sample Number

mths

Sample Date

Machine Age

Sample Rating Trend

NORMAL

WC0814159

0

Machine Io B22068 - DEPAL 4 (S/N 02-341686) Component

Hydraulic System

HYDRAULIC OIL FG ISO 32 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

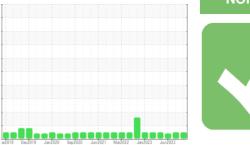
All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



SAMPLE INFORMATION method WC0872398 WC0842467 Client Info Client Info **19 Dec 2023** 19 Sep 2023 21 Jun 2023 0 0 Client Info

Oil Age	mths	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Filtered
Sample Status				NORMAL	NORMAL	ABNORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	<1	4
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	2	<1
Lead	ppm	ASTM D5185m	>20	0	<1	5
Copper	ppm	ASTM D5185m	>20	2	2	2
Tin	ppm	ASTM D5185m	>20	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	5	0	0	0
Calcium	ppm	ASTM D5185m	12	0	<1	<1
Phosphorus	ppm	ASTM D5185m	400	472	439	524
Zinc	ppm	ASTM D5185m	12	2	30	402
Sulfur	ppm	ASTM D5185m	650	378	540	687
CONTAMINANTS	\$	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	2	5	4
Sodium	ppm	ASTM D5185m		<1	0	0
Potassium	ppm	ASTM D5185m	>20	0	<1	1
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	429	2279	
Particles >6µm		ASTM D7647	>1300	120	383	
Particles >14µm		ASTM D7647	>160	13	26	
Particles >21µm		ASTM D7647	>40	5	7	
Particles >38µm		ASTM D7647	>10	0	1	
Particles >71µm		ASTM D7647	>3	0	0	
Oil Cleanliness		ISO 4406 (c)	>20/17/14	16/14/11	18/16/12	

mg KOH/g ASTM D8045 0.50 Acid Number (AN)

FLUID DEGRADATION

Contact/Location: Craig Bennett - HORBEL

0.24

0.26

0.28



Ba 3 A 28

26

14 12

12k 10k 8k 8k 6k

4k

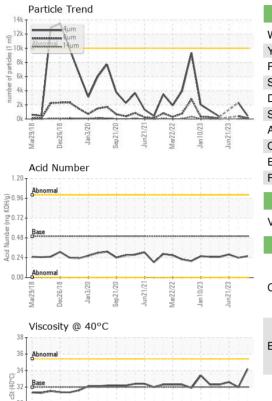
21

01

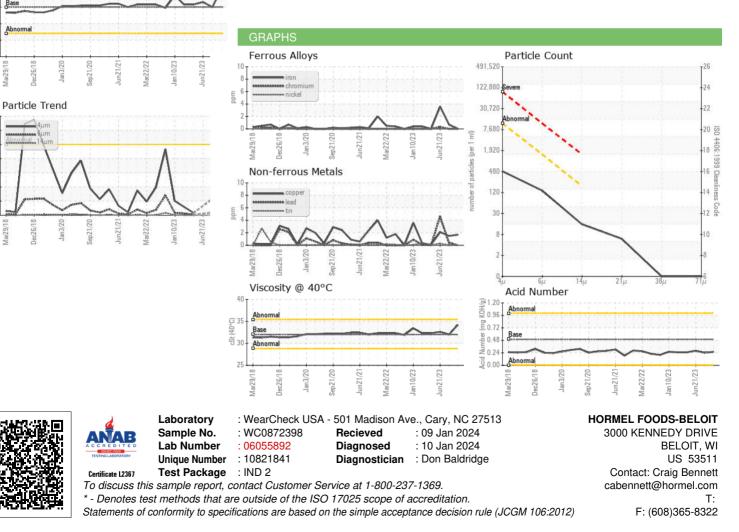
Mar29/18

Mar29/18

OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	LIGHT
Debris	scalar	*Visual	NONE	NONE	NONE	🔺 MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method				history2
FLUID PROPERT Visc @ 40°C	TES cSt	method ASTM D445	limit/base 32	current 34.2	history1 32.0	history2 32.6
	cSt					· · · · · ·
Visc @ 40°C	cSt	ASTM D445	32	34.2	32.0	32.6



Contact/Location: Craig Bennett - HORBEL